

In the claims:

Please amend the claims as follows:

1. (Currently Amended). A G protein-coupled receptor protein selected from the group consisting of:

(a) a protein having an amino acid sequence selected from the group consisting of SEQ ID NO: 4, 5, 6, 28, 29, 30, and 31;

(b) a protein having an amino acid sequence selected from the group consisting of SEQ ID NO: 4, 5, 6, 28, 29, 30, and 31 ~~of (a)~~, wherein one ~~or more~~ to thirty amino acids of the protein are modified by deletion, addition, insertion, and/or substitution by another amino acid residue; and

131 (c) a protein encoded by DNA that hybridizes under highly stringent conditions with DNA consisting of a ~~having a nucleotide~~ sequence selected from the group consisting of SEQ ID NO: 1, 2, 3, 24, 25, 26, and 27.

2. (Original) A fusion protein comprising the protein of claim 1 and another peptide or polypeptide.

3. (Currently Amended) A ~~peptide comprising a part~~ functional fragment of the protein of claim 1.

4. (Currently Amended) A DNA encoding the protein ~~or peptide~~ of claim 1.

5. (Original) A vector comprising the DNA of claim 4 inserted therein.

6. (Original) A transformant carrying the DNA of claim 4 in an expressible manner.

7. (Currently Amended) A method of producing a protein, the method ~~or peptide~~ comprising the steps of: cultivating the transformant of claim 6, and recovering the protein ~~or peptide~~ expressed therein.

8. (Currently Amended) A method of screening for a compound ~~that is capable of binding to the protein of claim 1,~~ that binds to a G protein-coupled receptor protein, the method comprising the steps of:

- (a) exposing a test sample to the protein ~~or peptide~~ of claim 1, and
- (b) selecting ~~the~~ a compound that binds to the protein ~~or peptide of claim 1.~~

9. (Currently Amended) A method of screening for a ligand ~~and/or agonist that is capable of binding to the protein of claim 1,~~ of a G protein-coupled receptor protein, the method comprising the steps of:

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- (a) exposing a test sample to a cell expressing the protein ~~or peptide~~ of claim 1 on its surface,
 - (b) measuring a biochemical change in said cell, and
 - (c) selecting ~~the~~ a compound that induces said biochemical change in said cell.

10. (Original) An antibody that binds to the protein of claim 1.

11. (Currently Amended) A method of detecting or measuring a ~~protein or peptide~~ G protein-coupled receptor protein, the method comprising the steps of: exposing the antibody of claim 10 to a test sample ~~which is assumed to comprise said protein or peptide,~~ and detecting or measuring the generation of an immune complex between said antibody and said protein ~~or peptide.~~

12. (Currently Amended) A DNA of a length of 15 nucleotides or longer that hybridizes under highly stringent conditions with a DNA ~~having~~ consisting of a nucleotide sequence selected from the group consisting of SEQ ID NOs: 1, 2, 3, 24, 25, 26, 27, and the complements of SEQ ID NOs: 1, 2, 3, 24, 25, 26, and 27 ~~their complementary strands.~~
